# Fall 2016 Academic Achievers Report Office of Institutional Research 2016-12-07

### Introduction

In this research brief, the Office of Institutional Research provides updated statistics for the Academic Achievers Program (AAP). These updates include figures of student participation, demographics, incoming student characteristics, and academic performance at the University of Houston. These findings are longitudinal with an updated focus on Fall 2013 to Fall 2015 AAP cohorts and non-participant Hispanic students.

#### Quick Facts

- Since 1996, there have been a total of 340 AAP Participants, the majority of which are female students.
- AAP students come to UH with lower SAT scores compared to their Hispanic counterparts, 1005 and 1053, respectively. Both groups trail the overal UH average of 1098.
- AAP students earned a higher average GPA score (3.26) compared to their Hispanic counterparts (2.82) and compared to the UH overall average GPA (2.90).
- AAP students passed an average of 94.8% of attempted student credit hours in Fall 2015 compared to 87.6% for non-AAP Hispanic students.
- From 1996 to 2009, AAP students had an average six-year graduation rate of 66.9% compared to 39.3% for non-AAP Hispanic students.

## **Demographics**

There are a total of 340 AAP participants since Fall 1996. Figure 1 summarizes the number of AAP students joining the program by academic year. On average, there are about 18.8 new AAP students each recruiting year with a range of 11 to 30 new program participants.<sup>1</sup>

From 2007–2015, there were 86 female AAP students compared to 65 male students, making female AAP students 60% of the program roster between these years (Figure 2). The majority of AAP students enter the program as freshmen (65.6%, n=99), followed by sophomores (23.8%, n=36), and juniors (10.6%, n=16). There were no students entering the program as seniors.

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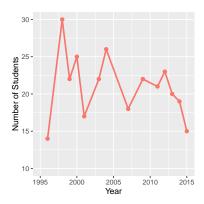


Figure 1: AAP New Student Counts by Year.

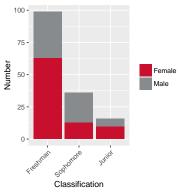


Figure 2: AAP Students by Gender and Classification, 2007–2015. <sup>1</sup> AY 2008 was omitted - only two AAP students admitted during this year.

#### AAP Students' Academic Performance

#### SAT Total Scores

SAT scores for AAP students are historically lower compared to non-AAP Hispanic undergraduates. This updated analysis finds the same relationship is true despite modest increases for the past three AAP cohorts. SAT total scores are calculated using maximum math scores plus maximum critical reading scores. SAT figures show AAP fall cohorts compared to non-AAP Hispanic students in that given semester (see appendix tables for more details). Figure 3 shows AAP students' average SAT score increased approximately 64 points from 2013 to 2015, 941 and 1005 points, respectively. This increase has helped to close the gap between AAP students and their Hispanic counterparts to 48 points in 2015 compared to 106 points in 2013. Both groups trail the overall UH 3-year average SAT score of 1093.

Disaggregating total scores by gender shows males overall outperform their female counterparts in both groups. One exception can be seen in Fall 2013 where AAP males and AAP females earned similar scores (941; Figure 4). In 2015, AAP females earned scores approximately 73 points lower than their Hispanic female counterparts (955 and 1028, respectively). Overall, recent SAT scores show non-AAP Hispanic students continue to outperform AAP students as reported in previous evaluation years.

#### SAT Component Scores

Looking closely at SAT component scores for math and critical reading uncovers different patterns for AAP and non-AAP Hispanic students when it comes to gender. Generally, AAP & Hispanic male students score higher than their female counterparts. Interestingly, however, AAP male students outperformed non-AAP female Hispanic students in 2014 and 2015 by 9 and 22 points, respectively, on the SAT math component (Figure 5). In 2015, AAP males scored an average of 545 for math whereas Hispanic females scored an average of 523.

Critical reading scores are relatively similar between male and females within groups except for AAP students in 2015. AAP females on average scored 40.8 points less in critical reading compared to male AAP participants (452.5 and 493.3, respectively). The disparity between AAP females and their Hispanic counterparts is even greater. Non-AAP Hispanic females scored on average a score of 505, which is 52.5 points greater than their AAP female counterparts.

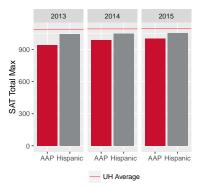


Figure 3: Average SAT Total Max Score for AAP and Hispanic Students, Fall 2013–2015.

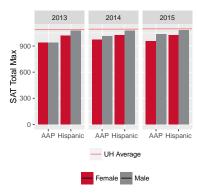


Figure 4: Average SAT Total Max Score for AAP and Hispanic Students by Gender, 2013–2015.

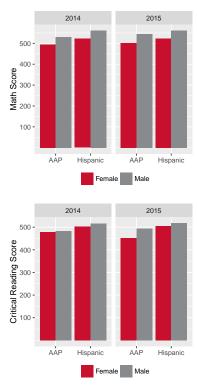


Figure 5: SAT Max Math and Critical Reading Scores for AAP and Hispanic Students by Gender, 2014–2015.

#### UH GPA

AAP students come to UH with lower SAT scores compared to their Hispanic peers. However, AAP students show greater academic performance while enrolled at UH as measured by cumulative GPA. Overall, AAP students earn higher average GPAs compared to the UH Average (2.90). AAP students also out-perform their Hispanic peers. From Fall 2013 to Fall 2015, AAP students earned 0.51 (3.34), 0.09 (2.91), and 0.44 (3.26) higher GPAs compared to their non-AAP Hispanic counterparts (Figure 6). This is an average difference of 0.35 points for these three years. Further research is needed to determine whether this is due to AAP program participation (see UHIR AAP Evaluation, 2010).

Figure 7 disaggregates the groups by gender. Female students out-perform their male counterparts across the board. The highest recorded average GPA belongs to AAP females in 2013 (3.51). The greatest disparity between groups exists between AAP females and their Hispanic counterparts (2.954) by 0.63 points in 2013. AAP males also tend to earn higher GPA scores compared to male Hispanic students except for 2014. In Fall 2014, AAP males earned slightly lower GPAs (2.74) compared to their Hispanic counterparts (2.76).

#### UH Semester Credit Hours (SCH)

In the past three years, AAP students passed more term credit hours for progress compared to their Hispanic counterparts, except for 2014. Percent credit hours passed is calculated using the number of credits passed divided by the total number of credits attempted for progress for the Fall term indicated in the graphics. In Fall 2013, AAP students passed 96.6% of their credit hours compared to 88.4% for non-AAP Hispanic students (Figure 8). During Fall 2014, AAP students passed 80.4% SCH compared to 88.1% for Hispanic students. AAP students passed 94.8% SCH in Fall 2015 compared to 87.6% for non-AAP Hispanic students.

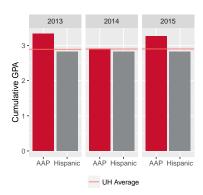


Figure 6: Average Cumulative UH GPA for AAP and Hispanic Students, 2013–2015.

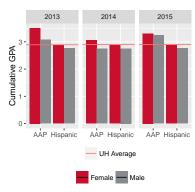


Figure 7: Average Cumulative UH GPA for AAP and Hispanic Students by Gender, 2013–2015.

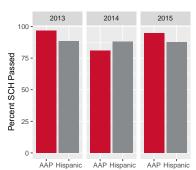
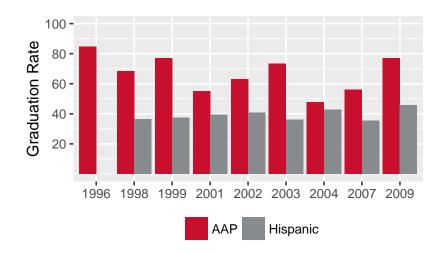


Figure 8: Percent Term SCH Passed for AAP and Hispanic Students, Fall 2013–2015.

#### Graduation Rates

In addition to university academic performance, First-Time in College (FTIC) AAP students have higher graduation rates compared to their Hispanic counterparts.<sup>2</sup> In the nine years depicted in Figure 9, AAP students had an average graduation rate of 66.9%. The 1996 AAP cohort had the highest graduation rate, at 84.6%, followed by the 1999 and 2009 AAP cohorts (76.9%). The lowest rate for AAP students was 47.6% in 2004. Non-AAP Hispanic students had an average graduation rate of 39.3% with the higest rate of 45.8% in 2009 and the lowest rate of 35.5% in 2007. These figures provide further evidence of greater academic success for AAP students compared to non-AAP Hispanics. For yearly graduation and retention rates, please see Table 1 in the appendix.



<sup>2</sup> This analysis looks at First-Time in College (FTIC) students only. Graduation rates are from the first year in college to the sixth year in college.

Figure 9: Six Year Graduation and Retention Rates for AAP and Hispanic Students, 1996–2009.

# Appendix

Cohort	Statistic	Base	One	Two	Three	Four	Five	Six
1996	Enrolled	13	13	13	12	11	4	1
	Cumulative Graduation		0	0	1	2	8	11
	Not Enrolled		0	0	0	0	1	1
	Annual Retention Rate		100.00%	100.00%	92.30%	84.60%	30.80%	7.70%
	Cumulative Graduation Rate				7.70%	15.40%	61.50%	84.60%
1997	Enrolled	8	8	7	7	6	3	1
	Cumulative Graduation		0	0	0	1	4	6
	Not Enrolled		0	1	1	1	1	1
	Annual Retention Rate		100.00%	87.50%	87.50%	75.00%	37.50%	12.50%
	Cumulative Graduation Rate					12.50%	50.00%	75.00%
1998	Enrolled	19	18	17	15	16	8	2
	Cumulative Graduation		0	0	0	1	9	13
	Not Enrolled		1	2	4	2	2	4
	Annual Retention Rate		94.70%	89.50%	78.90%	84.20%	42.10%	10.50%
	Cumulative Graduation Rate					5.30%	47.40%	68.40%
1999	Enrolled	13	13	13	12	8	4	2
	Cumulative Graduation		0	0	0	4	7	10
	Not Enrolled		0	0	1	1	2	1
	Annual Retention Rate		100.00%	100.00%	92.30%	61.50%	30.80%	15.40%
	Cumulative Graduation Rate					30.80%	53.80%	76.90%
2001	Enrolled	20	18	17	17	15	8	4
	Cumulative Graduation		0	0	0	0	6	11
	Not Enrolled		2	3	3	5	6	5
	Annual Retention Rate		90.00%	85.00%	85.00%	75.00%	40.00%	20.00%
	Cumulative Graduation Rate						30.00%	55.00%
2002	Enrolled	19	19	15	15	14	9	3
	Cumulative Graduation		0	0	0	0	6	12
	Not Enrolled		0	4	4	5	4	4
	Annual Retention Rate		100.00%	78.90%	78.90%	73.70%	47.40%	15.80%
	Cumulative Graduation Rate						31.60%	63.20%
2003	Enrolled	15	14	14	14	13	9	2
	Cumulative Graduation		0	0	0	0	4	11
	Not Enrolled		1	1	1	2	2	2
	Annual Retention Rate		93.30%	93.30%	93.30%	86.70%	60.00%	13.30%
	Cumulative Graduation Rate						26.70%	73.30%

Table 1: Six-Year Graduation and Retention Rate for AAP FTICStudents by Year.

Cohort	Statistic	Base	One	Two	Three	Four	Five	Six
2004	Enrolled	21	20	16	17	14	10	5
	Cumulative Graduation		0	0	0	1	5	10
	Not Enrolled		1	5	4	6	6	6
	Annual Retention Rate		95.20%	76.20%	81.00%	66.70%	47.60%	23.80%
	Cumulative Graduation Rate					4.80%	23.80%	47.60%
2007	Enrolled	25	22	19	18	13	6	3
	Cumulative Graduation		0	0	0	4	11	14
	Not Enrolled		3	6	7	8	8	8
	Annual Retention Rate		88.00%	76.00%	72.00%	52.00%	24.00%	12.00%
	Cumulative Graduation Rate					16.00%	44.00%	56.00%
2009	Enrolled	13	13	13	13	12	3	1
	Cumulative Graduation		0	0	0	1	7	10
	Not Enrolled		0	0	0	0	3	2
	Annual Retention Rate		100.00%	100.00%	100.00%	92.30%	23.10%	7.70%
	Cumulative Graduation Rate					7.70%	53.80%	76.90%
2010	Enrolled	15	12	11	11	8	1	0
	Cumulative Graduation		0	0	0	2	8	9
	Not Enrolled		3	4	4	5	6	6
	Annual Retention Rate		80.00%	73.30%	73.30%	53.30%	6.70%	
	Cumulative Graduation Rate					13.30%	53.30%	60.00%
2011	Enrolled	21	21	20	20	13	6	
	Cumulative Graduation		0	0	0	7	13	
	Not Enrolled		0	1	1	1	2	
	Annual Retention Rate		100.00%	95.20%	95.20%	61.90%	28.60%	
	Cumulative Graduation Rate					33.30%	61.90%	
2012	Enrolled	14	13	12	11	8		
	Cumulative Graduation		0	0	1	4		
	Not Enrolled		1	2	2	2		
	Annual Retention Rate		92.90%	85.70%	78.60%	57.10%		
	Cumulative Graduation Rate				7.10%	28.60%		
2013	Enrolled	18	18	18	15			
	Cumulative Graduation		0	0	0			
	Not Enrolled		0	0	3			
	Annual Retention Rate		100.00%	100.00%	83.30%			
	Cumulative Graduation Rate							
2014	Enrolled	16	15	12				
	Cumulative Graduation		0	0				
	Not Enrolled		1	4				
	Annual Retention Rate		93.80%	75.00%				
	Cumulative Graduation Rate							

	Fall 2013		Fall 2014		Fall 20	15	Total	
	Avg. SAT	Count	Avg. SAT	Count	Avg. SAT	Count	Avg. SAT	Count
AAP	941	20	991	19	1005	15	975	54
Female	941	12	973	10	955	6	956	28
Male	942	8	1013	9	1038	9	999	26
Hispanic	1047	9,023	1051	9,832	1053	10,650	1051	29,505
Female	1019	4,651	1024	5,060	1028	5,429	1024	15,140
Male	1077	4,372	1079	4,772	1080	5,221	1079	14,365
Total	1046	9,043	1051	9,851	1053	10,665	1050	29,559

Table 2: Maximum SAT Total Averages for AAP and Hispanic Students, Fall 2013–2015.

Table 3: Average UH Cumulative GPA for AAP and Hispanic Students, Fall 2013–2015.

	Fall 2013		Fall 2014		Fall 20	15	Total		
	Avg. GPA	Count	Avg. GPA	Count	Avg. GPA	Count	Avg.GPA	Count	
AAP	3.3	20	2.9	19	3.3	15	3.2	54	
Female	3.5	12	3.1	10	3.3	6	3.3	28	
Male	3.1	8	2.7	9	3.2	9	3	26	
Hispanic	2.8	9,023	2.8	9,832	2.8	10,650	2.8	29,505	
Female	2.9	4,651	2.9	5,060	2.9	5,429	2.9	15,140	
Male	2.8	4,372	2.8	4,772	2.8	5,221	2.8	14,365	
Total	2.8	9,043	2.8	9,851	2.8	10,665	2.8	29,559	

Table 4: Average Percent Fall Term Credit Hours Passed forProgress for AAP and Hispanic Students, Fall 2013–2015.

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	Fall 2013		Fall 2014		Fall 2015	)	Total	
	Avg. % SCH	Count	Avg. % SCH	Count	Avg. % SCH	Count	Avg. % SCH	Count
AAP	96.6	20	80.8	19	94.8	15	90.5	54
Female	100	12	85	10	100	6	94.6	28
Male	91.4	8	76.2	9	91.3	9	86.1	26
Hispanic	88.4	9,023	88.2	9,832	87.6	10,650	88.1	29,505
Female	89.8	4,651	89.8	5,060	89	5,429	89.5	15,140
Male	87	4,372	86.4	4,772	86.1	5,221	86.5	14,365
Total	88.5	9,043	88.1	9,851	87.6	10,665	88.1	29,559

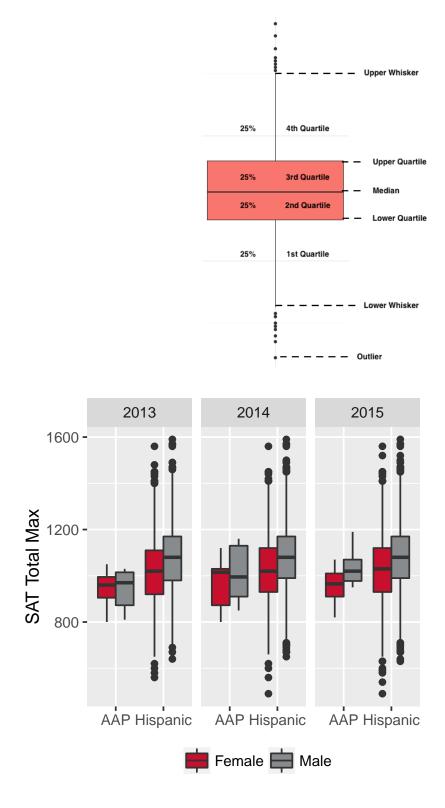
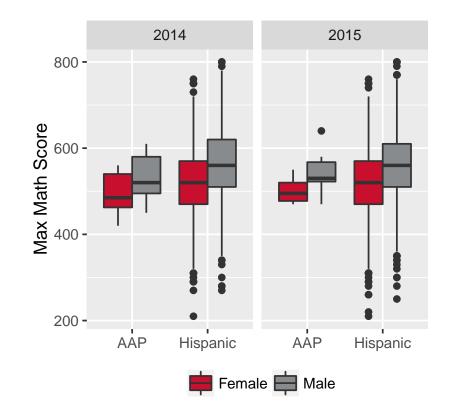


Figure 10: How to Read a Boxplot

Figure 11: SAT Total Max Score for AAP and Hispanic Students by Gender, 2013–2015.



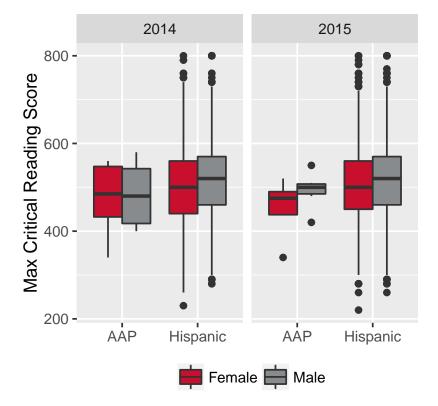
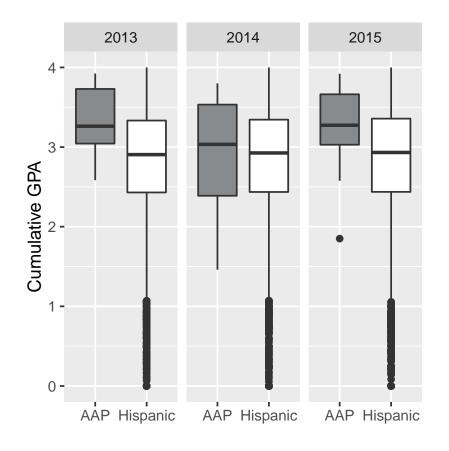
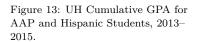


Figure 12: SAT Max Math and Critical Reading Scores for AAP and Hispanic Students by Gender, 2014–2015.





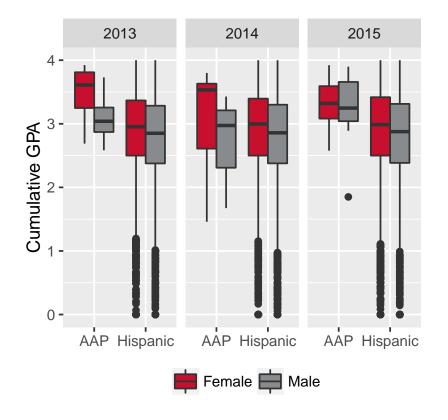


Figure 14: UH Cumulative GPA for AAP and Hispanic Students by Gender, 2013–2015.